

REMARKS

Claims 1 through 16 are pending in this application. Claims 1, 2, 11 and 12 have been amended. Care has been exercised to avoid the introduction of new matter. Adequate descriptive support for the present Amendment should be apparent throughout the originally filed disclosure including the originally presented claims, noting that claims 2 and 12 are properly dependent upon claims 1 and 11, respectively, by further restricting their respective independent claims. Applicants submit that the present Amendment does not generate any new matter issue.

Claims 1 through 16 were rejected under 35 U.S.C. § 103 for obviousness predicated upon Sakai et al.

In the statement of the rejection, the Examiner referred to Figs. 1 and 25 of Sakai et al., asserting the disclosure of a method and apparatus corresponding to certain features of the claimed inventions, including a filler and having a chamfer at the opening edge portion of the guide holes 130, referring to column 8, lines 1 through 8 and asserting "... as shown in figures" (page 3 of the April 13, 2004 Office Action, line 11). This determination is not accurate.

The Examiner then asserted that the guide hole **inherently** comprises a first hole portion with a substantially constant diameter connected to the chamfer and a second hole portion connected to the first hole portion having a diameter larger than the first hole portion. This determination of inherency is erroneous.

The Examiner then concluded that one having ordinary skill in the art would have been motivated to optimize the average particle size of the filler. This conclusion is legally erroneous. Accordingly, this rejection is traversed.

The Missing Chamfer

Independent claims 1 and 11, directed to the connector ferrule and method of making thereof, respectively, each recite a connector having a chamfer provided at the opening edge portion of the guide holes on the connection end surface thereof. The Examiner asserts that such is disclosed by Sakai et al. But the Examiner does not follow up, as required by consistent judicial precedent, by specifically identifying wherein Sakai et al. describe in the text or otherwise disclose, or depict in the drawings, or even suggest, providing a chamfer at the opening edge portion of the guide holes of the connector. It is well settled that the Examiner is obliged to specifically identify wherein a reference is perceived to disclose elements of a claimed invention. See, for example, *Smiths Industries Medical System v. Vital Signs Inc.*, 183 F.3d 1347, 51 USPQ2d 1415 (Fed. Cir. 1999). Again, it is **not** apparent and the Examiner did **not** identify wherein Sakai et al. disclose or otherwise describe, suggest or depict a chamfer on the opening edge portion of guide holes of the connector. On this basis alone the rejection cannot stand.

Applicants would stress that the chamfer provided by the present invention on the opening edge portion of the guide holes is **functionally significant**. Indeed, advertizing to Fig. 4, noting chamfer 13, Applicants would stress that the formation of a chamfer at the opening edge portion of the guide holes not only facilitates the insertion of guide pins into

the guide holes, but the chamfer surface becomes comparatively smooth, thereby preventing chipping or bulging of the chamfer due to contact with the guide pins. Thus, the chamfer enables accurate positioning of the guide pins in the hole. Moreover, the amount of abrasion powder produced by friction between the guide pins and the chamfer is reduced, thereby minimizing the possibility of optical fiber damage caused by adhesion of the abrasion powder to the end surface of the optical fibers. Further, the use of a filler with an average particle size no greater than 40 μm , e.g., no greater than 20 μm , improves moldability when the chamfer is provided in the die. In this respect the Examiner's attention is invited to the paragraph bridging pages 2 and 3 of the written description of the specification. Again, Sakai et al. do not describe or otherwise disclose, suggest or depict a chamfer at the opening edge portion of the guide holes of the connector.

There is no inherency

In order to establish inherency the Examiner must present a factual basis upon which to predicate the determination that an allegedly inherent feature is necessarily present in the prior art. *Crown Operations International Ltd. v. Solutia Inc.*, 289 F.3d 1367, 62 USPQ2d 1917 (Fed. Cir. 2002); *Finnegan Corp. v. ITC*, 180 F.3d 1354, 51 USPQ2d 1001 (Fed. Cir. 1999); *In re Robertson*, 169 F.3d 743, 49 USPQ2d 1949 (Fed. Cir. 1999); *Electro Medical Systems S.A. v. Cooper Life Sciences, Inc.*, 34 F.3d 1048, 32 USPQ2d 1017 (Fed. Cir. 1994); *Continental Can Co. USA, Inc. v. Monsanto Co.*, 948 F.2d 1264, 20 USPQ2d 1746 (Fed. Cir. 1991). No such factual basis has been established.

The Examiner has predicated the inherency determination on the assumption that the apparatus disclosed by Sakai et al. contains a chamfer in the opening edge

portion of the guide holes. However, the Examiner did not factually establish the existence of any such chamfer.

The Examiner asserted that one having ordinary skill in the art would have been motivated to optimize the particle size. However, no specific reason has been offered by the Examiner who merely asserts its obvious to discover an optimum value of a result effective variable. However, the Examiner did not discharge the burden of establishing that the particle size of the filler disclose by Sakai et al. is, in fact, an art recognized result effective variable. The Examiner does not even attempt to establish that Sakai et al. suggest that the particle size is functionally significant, i.e., a result effective variable. This being the case it is legally erroneous for the Examiner to say that one having ordinary skill in the art would have been motivated to optimize the particle size where the applied reference to Sakai et al. neither discloses nor suggests a range for the particle size or that the particle size is functionally significant in order to impact any art recognized result effective variable. *In re Rijckaert*, 9 F.3d 1531, 28 USPQ2d 1955 (Fed. Cir. 1993); *In re Yates*, 663 F.2d 1054, 211 USPQ 1149 (CCPA 1981); *In re Antonie*, 559 F.2d 618, 195 USPQ 6 (CCPA 1977).

On the other hand, it is Applicants who disclose that the particle size is a result effective variable with respect to improving moldability when the chamfer is molded in the die for improved surface smoothness. In this respect Applicants would again invite the Examiner's attention to the paragraph bridging pages 2 and 3 of the rewritten description of the specification, as well as the first paragraph on page 4 of the written description of the specification, for example.

The Problem Element

The problem element is an important factor to consider not only when assessing the requisite motivational element, but it is also an indicium of nonobviousness. See, for example, *Ecolochem Inc. v. Southern California Edison, Co.* 227 F.3d 1361, 56 USPQ2d 1065 (Fed. Cir. 2000); *In re Rouffet*, 149 F.3d 1350, 47 USPQ2d 1453 (Fed. Cir. 1998); *North American Vaccine, Inc. v. American Cyanamid Co.*, 7 F.3d 1571, 28 USPQ2d 1333 (Fed. Cir. 1993); *Northern Telecom, Inc. v. Datapoint Corp.*, 908 F.2d 931, 15 USPQ2d 1321 (Fed. Cir. 1990); *In re Newell*, 891 F.2d 899, 13 USPQ2d 1248 (Fed. Cir. 1989); *In re Nomiya*, 509 F.2d 566, 184 USPQ 607 (CCPA 1975).

The problem addressed and solved by the claimed invention is the chipping and bulging which occurs at the inner wall surface of the guide pin hole of the connector ferrule when the guide pin is brought into contact with the inner wall surface. Such chipping or bulging creates a gap between the optical fibers and the optical connection loss increases. The Examiner has erroneously ignored this problem element which, as previously pointed out, must be given consideration in attempting to establish the requisite realistic motivation for modifying the device and method disclosed by Sakai et al., and must be given consideration as a indicium of nonobviousness. It is not apparent wherein Sakai et al. express any concern for this problem which is addressed and solved by the claimed invention.

Conclusion

Based upon the foregoing Applicants submit that the Examiner did not establish a *prima facie* basis to deny patentability to the claimed invention under 35 U.S.C. § 103 for

lack of the requisite factual basis and want of the requisite realistic motivation. Moreover, upon giving due consideration to the problem addressed and solved by the claimed invention, which does not even appear to be a blip on the radar screen of Sakai et al., the conclusion appears inescapable that one having ordinary skill in the art would **not**, repeat **not**, have found the claimed invention **as a whole** obvious within the meaning of 35 U.S.C. § 103. *Jones v. Hardy*, 727 F.2d 1524, 220 USPQ 1021 (Fed. Cir. 1984). Applicants, therefore, submit that the imposed rejection of claims 1 through 16 under 35 U.S.C. § 103 for obviousness under Sakai et al. is not factually or legally viable and, hence, solicit withdrawal thereof.

Claims 1 through 16 were rejected under ground of double patenting of the obviousness type over claims 1, 6 through 9 and 12 of U.S. Patent 6,673,300 (the '300 Patent).

This rejection is traversed. Indeed, Applicants submit herewith a terminal disclaimer (Exhibit A) with respect to the '300 patent, thereby overcoming the imposed rejection on the ground of double patenting of the obviousness type. Accordingly, withdrawal of the imposed rejection of claims 1 through 16 on the ground of double patenting of the obviousness type over claims 1, 6 through 9 and 12 of the '300 patent is solicited.

Based on the foregoing it should be apparent that the imposed rejections have been overcome and that all pending claims are in condition for immediate allowance. Favorable consideration is, therefore, respectfully solicited.

To the extent necessary, a petition for an extension of time under 37 C.F.R. 1.136 is hereby made. Please charge any shortage in fees due in connection with the filing of this paper, including extension of time fees, to Deposit Account 500417 and please credit any excess fees to such deposit account.

Respectfully submitted,

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